NEUROFIBROMA ARISING IN THE BRACHIAL PLEXUS MIMICKING METASTATIC LYMPH NODE

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Background Abnormal hypoechoic axillary mass co-presenting suspicious malignant lesion of the breast can be misconceived as a metastatic lymph node. Few reports of neurofibroma related to the breast and axilla are available.

Case A 70-year-old woman visited for the evaluation of left mass on previous mammogram. On initial physical examination, there is no palpable lesion on the whole breast and both axilla. We performed spot compression mammography of left breast and ultrasonography. Ultrasonography revealed a 0.87 × 0.82 cm ill-defined hypoechoic nodule (BIRADS category C4c) in direction of 9’o’clock 2 cm distance from left nipple, about a 1 cm pathological lymph node in the left axilla suggesting left breast cancer with axillary lymph node metastasis. Interestingly, there was an 3.6 × 1.6 cm incidental well-defined lobulating intramuscular mass in the left upper arm with the similar nature of axillary mass. Then a second physical examination showed a movable 4 cm firm mass in left upper inner arm. A core needle biopsy was done on the left breast, axilla, and upper arm. During core biopsy of upper arm mass, patient complained pain sense. The pathological diagnoses were neurofibroma for the left axilla mass and left upper arm mass and papillary neoplasm for the left breast mass, suggesting an intraductal papilloma. She underwent surgery of the left breast mass and masses of the left axilla and the left upper arm. 1.0 cm oval firm mass on brachial plexus and 3.5 cm lobulating mass on median nerve were found and finely dissected from the nerves. The final pathological diagnoses were neurofibroma for the left axilla and left upper arm masses and intraductal papilloma (tumor sizes: 5 × 6 mm and 1.5 × 1 mm) for the left breast mass. No symptoms or complications were observed on postoperative day 1. She had no numbness or weakness after 1 month.

Conclusions Neurofibromatosis type 1 (NF1), also referred to as von Recklinghausen disease, that is characterized by multiple neurofibromas and several cases in the literature have described invasive ductal carcinomas associated with von Recklinghausen disease. We report an unusual case of neurofibroma related to the axilla that was treated successfully.